THE CRISIS OF 1920 AND THE PROBLEM OF CONTROLLING BUSINESS CYCLES

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Interest in the problem of controlling business cycles itself fluctuates with the condition of business. In periods of prosperity few men are concerned to prevent the increasing activity from running to extremes and breeding a crisis. During the crisis everyone is so worried by what tomorrow may bring forth that he takes thought only of emergency measures. It is in periods of depression, when the outlook is drab rather than perilous and when business men have leisure thrust upon them, that cogitation upon the cause and the cure of business cycles becomes a mass phenomenon. Then thousands of men recall their earlier experiences of hard times, speculate with their associates about the character and causes of such seasons, and consider schemes for preventing their recurrence. In arranging that the American Economic Association devote the opening session of its thirty-fourth annual meeting to a consideration of the crisis of 1920 and its lessons, President Hollander is seeking to take at its flood this tide in the thoughts of men.

My share in the program is greatly facilitated by the accomplishments of the audience and the character of the preceding paper. I can take for granted intimate knowledge of the phenomena of business cycles, a refreshed memory of the peculiarities of the latest crisis and depression, and critical interest in the various proposals which have been made for controlling the business cycle. These advantages enable me to dispense with preliminaries, to jump from one topic to another without stopping to buld bridges, and to pass lightly over details.

I

Let me begin with a few words about the possibility of solving the problem of control over the business cycle. No competent student of the subject will assert that the rhythmical alternations of activity and stagnation so characteristic of modern business can be entirely eradicated so long as we maintain the institutions of the money economy. We do not know what measure of success can ultimately be attained. But on the other hand, there is nothing in current theories of business cycles and nothing in the economic history of the past which forbids us to hope that by well-conceived measures we can mitigate in great part the suffer-

ings which we undergo at present in consequence of booms and depressions.

Certainly such hopes are not forbidden by the theories which trace the business cycle to cosmic causes over which we have no prospect of exercising control. Suppose, for example, that Professor Henry L. Moore definitely establishes his hypothesis that "the planet Venus in its eight-yearly periodic motion with respect to the Earth and the Sun" is the cause of "eight-year generating Cycles" upon our planet, and that these "generating cycles" constitute "the natural, material current which drags upon its surface the lagging, rhythmically changing values and prices with which the economist is more immediately concerned"[1] —suppose, I say, that this hypothesis is proven to be valid, still it does not follow that we shall remain forever helpless victims of the business cycle. For though we cannot alter the behavior of Venus, we could hope to counteract the effect of this behavior upon our fortunes by prudent management of processes which are subject to control. Though we cannot arrest the terrestrial seasons in their course, we do offset their influence sufficiently to avoid freezing to death in winter.

Nor need the long list of crises in the past quash our hopes. Business cycles have run a tolerably regular course in the United States for a century and in older nations for a longer period. But it is not inevitable that what has happened will repeat itself indefinitely. Indeed, this very history when examined closely offers strong encouragement to efforts at changing the course of business developments. For among the changes that have taken place in the character of business cycles are certain changes due to the purposeful intervention of men. Men have learned to exercise a considerable measure of control over at least one phase of the business cycle.

In the middle of the last century the English found that if the business public is assured in times of pressure that all solvent borrowers can get bank accommodation by paying a high discount rate there will be no panic fears, no runs on the banks, and no epidemics of needless bankruptcies. The adoption of this method of "crisis financiering" produced a marked change in the character of English business cycles: the crises became less spectacular, the

[1]Henry L. Moore, "The Origin of the Eight-Year Generating Cycle," *Quarterly Journal of Economics,* November, 1921; XXXVI, 29; and *Economic Cycles: Their Law and Cause,* 1914, 149.

liquidations became more circumspect but longer. At the same time the differences between English and American cycles became more marked. We continued to have violent panics, as in 1873, 1893, and 1907. Bankers and economists knew the reason and urged the remedy—such a centralization of banking resources as would enable American bankers to give their customers the same assurance that the English business men received. It took a generation to effect the necessary changes in our federal banking law, but President Wilson finally succeeded in getting Congress to pass the Federal Reserve Act in 1914. And six years later our new machinery was put to the test and found adequate.

To repeat, we have learned how to prevent crises from degenerating into panics, and from that success we may derive substantial encouragement to attack the next problems: how to lessen the excesses of booms and the sufferings of depressions.

II

In dealing with these problems we have seldom made the proper approach. After the usual human fashion we have tried to counteract the effects from which we suffer rather than to control the causes from which they flow. In every period of severe depression we have hurriedly devised emergency measures to prevent people from starving. Of course that is an effort in which every sensible man is glad to join once the emergency grows urgent. But obviously it would be far better to prevent these emergencies from arising—if that is possible. Our chief failing has been that we have not devoted sufficient constructive intelligence to finding out whether prevention is possible.

Happily this remark is today a commonplace. The most hopeful sign in our dealings with the economic difficulties of 1920-21 is that many men in public and in private stations have taken the constructive attitude, considering the future as well as the present, thinking about prevention as well as cure. That temper was a notable feature of the President's Conference on Unemployment, which under Secretary Hoover's leadership first arranged to coördinate the emergency measures for relieving distress this winter, and then provided machinery for framing a preventive program.

In most discussions of preventive measures it is notable that emphasis is laid upon the prosperous phase of the cycle as the phase which requires control. It is becoming a common opinion

that the time for effective action is the time when industrial activity is approaching the elastic limit set by full use of existing plant and when further expansion will be primarily a speculative boom. In addition to angry recrimination, there is much dispassionate analysis of the mistakes committed by the business community in 1919, analysis which seeks to find how such mistakes may be avoided in future.

The central issue in most discussions of what we did amiss in 1919 is the time at which the discount rates of federal reserve banks should have been raised. Most competent judges seem to agree with the "personal opinion" expressed on this point by Governor Benjamin Strong in his statement of last August to the Joint Commission of Agricultural Inquiry. "I believe," said Governor Strong, "if it had been possible, it would have been desirable for the Federal Reserve System to have advanced its rates at some point in the period between January and March, 1919"—instead of waiting until November.[1]

Since our concern is with the future we need not stop to discuss Governor Strong's limiting clause—"if it had been possible." Perhaps the Treasury's plans for floating the enormous Victory Loan in the spring really did make it impossible, or at least undesirable, to raise the federal reserve rates until that undertaking was accomplished. However that may be, we are justified in hoping that in the future such exigencies will seldom arise to prevent the Federal Reserve Board from adopting the policy which seems wise in the economic interest of the public. What most concerns us is that the Governor of the largest Federal Reserve Bank and many other experts believe after mature consideration that it would have been desirable to raise rates before the boom began. His reason for this conclusion is that an advance of rates would have moderated the expansion of business[2] and thereby diminished the severity of the crisis of 1920.

If Governor Strong and the men who share his opinion are right about the policy that was desirable in 1919, as I think they are, may we not generalize and say it is desirable to raise discount rates in future periods of expansion whenever signs appear that production is nearing its limit and that further expansion will consist mainly in bidding up the prices of securities, of industrial

[1]Hearing before the Joint Commission of Agricultural Inquiry, Sixty-Seventh Congress, 1st session, Part 13, p. 763.

[2]*Ibid.*, p. 772.

equipment, and of the goods in process of production and distribution?

Three objections have been made to this suggestion that the excesses of booms can be tempered by advancing discount rates at an earlier stage than has been customary in the past.

First, it is said that the measure would be ineffective. Bank discount is a minor item in most business undertakings, an item small in comparison both with other costs and with the profit margins anticipated in periods of prosperity. In this respect, we are told, American business differs notably from English business in pre-war days, when an enormous volume of international trading was done in London on margins so narrow that a change of a quarter of one per cent in the market rate of interest made a marked difference in the prospects of profits.

There is force in this contention, but not, I think, enough force to countervail Governor Strong's opinion that an advance of discount rates would moderate the expansion of business. And moderation is what is wanted to prevent booms from producing those credit entanglements which make inevitable a long period of liquidation. Granted that most business plans would not be affected by an advance of even one or two per cent of the discount rate, there probably remains a considerable volume that would be affected directly, and a larger volume that would be affected indirectly by a signal from the banks to observe caution. To control these marginal transactions would tend to relax the stresses that are accumulating within the business system.

A second objection is that the American public has been accustomed to accept reserve ratios as the best index of banking conditions and the proper guide to discount policy. In view of that fact it is chimerical to propose schemes that set up a novel basis of control. The wise line of advance "is not that of finding a substitute for the reserve ratio as a guide to credit policy, but rather that of finding how to make our reserve ratio a more sensitive and immediate indicator of changing conditions than it now is." Mr. A. C. Miller of the Federal Reserve Board has recently presented this view with his cogent lucidity in the *American Economic Review*.[4] And in accordance with this view he has suggested changes in the methods of federal reserve banking designed to make the American system work in much the same

[4] "Federal Reserve Policy," *American Economic Review*, June, 1921.

way as the English banking system worked for forty years before the war.

One may, I think, go far with Mr. Miller and yet stop short of the conclusion that the reserve ratio should continue indefinitely to be the guide to credit policy. Efforts to make "our reserve ratio a more sensitive and immediate indicator of changing conditions than it now is" are certainly in the line of progress. But I hope that progress will not be limited to attaining such measure of success as the Bank of England achieved for forty years before the war. For with all this success England suffered grievously from business cycles. We should aim at gaining a far more effective control over the wastes of prosperity and the sufferings of depression than the Bank of England has ever exercised. And while we may agree with Mr. Miller that our business public is unprepared for a discount policy that might raise the rates while reserve ratios were still high, yet we may not treat that attitude as an insuperable obstacle. As an official Mr. Miller confines himself to that which is immediately realizable; as an economist he might join us in considering plans which involve campaigns of education.

The final objection is that we have no definite means of knowing the precise point in the prosperous phase of the business cycle at which it is desirable to check expansion. But that objection has been met by the progress of statistical research and the ingenuity of Professor O. M. W. Sprague. Professor Sprague proposes to use index numbers of physical production such as have been made recently by Day, King, Snyder, and Stewart as a basis for discount policy. These series show that the increase in volume of business after a depression is for some time produced mainly by a rapid increase in the output of serviceable goods. During that phase of the cycle expansion is economically desirable. But whenever the existing industrial equipment is booked to capacity and the industrial army is fully employed then future growth in the supply of serviceable goods slows down to the rate at which new equipment and new hands can be provided and improved technical methods devised. After this point has been reached in the cycle a further rise of prices serves not to increase the current supply of serviceable goods, but to create confusion in the markets, stimulate disserviceable speculation, and to produce the credit entanglements which cause so much anxiety during the crisis and prolong the period of liquidation. Our aim accord-

ingly should be to check the rise of prices when the index numbers of physical output indicate that the limit of existing capacity is being approached. At that point it would be desirable to raise discount rates—even though reserve ratios might still be high.

This suggestion is being developed at present by Professor Sprague in a book which we shall all be reading next autumn. We cannot pass final judgment upon this original plan until we have seen it developed in full. But in the meantime let us not dismiss the idea on the ground that the public has now insufficient knowledge of business cycles to permit its adoption. If the scheme is desirable we should be ready to play our part in a campaign of education, and to begin that campaign by educating ourselves in the possibilities of the measure which Professor Sprague proposes. On the other hand let us not expect that any single plan will give us as large a measure of control over the business cycle as we desire and can attain. And this remark carries us forward to the consideration of certain other plans of control which merit attention.

III

The most promising among these other plans are so familiar to economists that I need hardly more than name them. First comes the long-range planning of public works, with intent to get a larger part of such undertakings executed in periods of depression. In England the possibilities of this plan have been investigated by Professor A. L. Bowley and its adoption has been urged by Mr. and Mrs. Webb. In America its chief champion is Mr. Otto T. Mallery. In 1917 Mr. Mallery persuaded the legislature of Pennsylvania to set up the machinery necessary for such a program. California copied the Pennsylvania legislation this year, and now a bill providing for a similar planning of federal public works is pending in Congress. For this plan it is urged that the saving in the cost of public works if contracts were let in periods of depression would be ample compensation for any inconvenience caused by postponing their completion for a year or two; that the reduction of competition for men and materials during periods of prosperity would lessen the strain of over-activity, and the increase of public contracts in times of depression would diminish the losses of both labor and capital. Like most other reforms this plan cannot be put into effect without an intelligent appreciation of what is now amiss on the part of large numbers

of men. It too requires a campaign of public education. And no one can tell in advance just what practical importance it may assume. But clearly the average annual volume of construction work now undertaken by various public bodies runs high in the hundreds of millions, and a considerable fraction of this imposing total can be allocated on the basis of the business cycle without detriment to social welfare. Further, it is quite possible that in addition to construction work public purchases of many standard supplies might advantageously be planned on this basis.

The extension of such long-range planning from public to private enterprises is an obvious suggestion. Before the war the French Ministry of Transportation seemed to be moving in this direction, with reference both to new construction and purchase of rolling stock. As long ago as 1908 Mr. Carl Snyder was arguing that American railways could profit by planning their expenditures, as they have long been planning their financing, with reference to the business cycle. In practice, most American railways still do precisely the opposite; they build and buy most freely in times of business activity when costs are high. For this policy there is at present a compelling reason. Few railway systems have the financial leeway necessary to allocate their outlays in the most advantageous fashion. They are forced to live from hand to mouth however extravagant that mode of life may be. But if it is socially desirable to leave the railways in private hands, it is desirable to secure them revenues sufficient to maintain efficient service and with such revenues they would in all probability find it profitable at least to level down the present inequalities of outlay as between good times and bad, if not actually to undertake more work in periods of depression than in periods of activity. And what is true of the railways in this respect is probably true also of most other industries. The total volume of purchases and construction work which might with advantage to all concerned be systematically planned with reference to the business cycle runs in the billions.

Quite a different line of attack upon the problem is represented by the various schemes of unemployment insurance now in operation or under consideration by government agencies and private employers. Perhaps the most interesting of these plans is the Huber bill at present pending in the Wisconsin legislature. This bill creates an Unemployment Insurance Company, which all manufacturers in the state would have to join, and to which they

would pay premiums varying according to their labor-turnover rates. These premiums would be used to provide unemployment allowances for employees discharged for no fault of their own. The central idea, however, is less to mitigate the misery of the man out of work than to prevent men from being discharged for lack of work. For by making his premium depend upon his labor turnover this bill gives the employer an inducement to stabilize his working force. Just as compulsory accident insurance has led to a large reduction in the number of accidents, so it is believed that compulsory unemployment insurance would lead to a large reduction in the number of the unemployed.

Concerning other plans for stabilizing economic activity—the improvement of employment offices, out-of-work benefits by labor unions, a greater centralization of banking, stabilizing the dollar, and the like, I shall say nothing—not because of lack of interest but because of lack of time. One matter however so nearly concerns our profession that I must dwell upon it—the need of increasing our knowledge of the business cycle and putting this knowledge to better use.

IV

All of us who have followed the crisis of 1920 and the prolonged liquidation which it started have had brought home to them the large speculative element in their thinking about the subject. For example, we have heard a great deal about "frozen credits" as a factor of the first magnitude in retarding recovery. We have read much about how these credits became "frozen" and how they may be "thawed." But if the factor is of first-rate importance we ought to know what a "frozen credit" is, what proportion of bank credits answers to the definition, what proportion of credits is frozen in ordinary times. The latter point is particularly significant and yet has been little attended to by bankers or economists. So far as I know no adequate analysis has ever been made of bank loans from this point of view. Certainly our insight into the difficulties which we are confronting and therefore our ability to meet these difficulties with success would be increased if our banking authorities would compile and publish statistics of this character.

In general American banking statistics rank high in comparison both with statistics from other fields at home and with banking statistics from other countries. But they present a second

lamentable gap. Some 10,000 banks are connected with the Federal Reserve System, and concerning their condition we get reports five times a year. But there are 20,000 other banks concerning which we have but one report a year, and that a meager one. It is true that these 20,000 state and private banks all put together have only half the resources of the 10,000 member institutions. But in such a situation as the present, when the financial position of the farmers counts so heavily in all reckonings, it is ill that we have to conjecture facts which we might know. The Federal Reserve Board or the Comptroller's Office would render a great service if they would fill this gap.

Once again, this year has taught us how poor are our statistics of unemployment, of wages, of earnings. When an attempt was made last autumn to find how many men were out of work, the Bureau of Labor Statistics and the Advisory Committee of the President's Conference on Unemployment could not get within a million of each other's estimates. About part-time employment we know almost nothing. The prices of labor are always a matter of the first consequence, and in the present time of readjustments there is especial need of current data—a need so pressing that it is hard to be grateful for the fragmentary surveys made from time to time by the Bureau of Labor Statistics. And even if we had comprehensive statistics of wage rates we should still be unable to make out changes in the economic position of the working classes or to get much light on the "buyers' strike" which is alleged to have precipitated the crisis unless we had data for pay-roll disbursements and family earnings. All our comparisons between wages and cost of living are rendered doubtful because the fluctuations of wages may be very imperfect representations of fluctuations in family incomes.

Then there is the whole field of merchandising—a big section of our economic life which is so obscure that we cannot say even approximately how many retail and how many wholesale stores there are in the country. This field is a difficult one, but is it really more difficult than agriculture, manufacturing, mining, or even transportation? Yet if one puts the current reports from a few department stores and mail-order houses which are published in the *Federal Reserve Bulletin* and the *Survey of Current Business* beside the material in the *Year Book of the Department of Agriculture*, the Census of Manufactures, the Geological Survey's reports on Mineral Resources, and the publications of the Interstate Com-

merce Commission, how slight the merchandising figures seem! And how difficult it is to see even a little bit into the business future when one has to guess at what is happening in the great processes of distributing merchandise. And how can we intelligently attack the problems of economic waste without a chance to follow goods beyond the walls of the factory and the cars of the railways?

There are few members of our Association who have not felt the lacks which I have lamented and other lacks besides. Most of them are lacks we cannot fill by individual enterprise. But we can do something as individuals by seizing every opportunity to use the data which are already available in our discussions of economic problems and to coöperate with the various agencies, public and private, which are striving to improve the range and character of statistical reporting. In this effort we have many allies. There is a rapidly growing sentiment among business men in favor of statistical publicity. Indeed the recent converts from this side sometimes err from an excess of zeal and propose impossibly elaborate inquiries—questionnaires that would require months to fill out. The statistical offices of the federal government—it is not invidious to mention especially the bureaus of the Department of Commerce and the research organizations of the Federal Reserve Board and the Federal Reserve banks—are showing a degree of enterprise which is most gratifying. Everything which we can do to increase interest in their output, and to answer their numerous calls for service, is a professional duty.

V

But to do what in us lies toward the improvement of statistical data is by no means the whole of our opportunity. After all, the endless tables of statistics which we need are only raw materials from which we are to construct a more serviceable account of economic behavior—an account that will serve better all efforts to raise the standards of social welfare. Among these efforts the effort to control the business cycle is but one, though one that is in a most hopeful stage at present. Here is a really progressive line of economic research. The books in this field rapidly go out of date, because the later writers have new things to say; they really have more knowledge, keener insight, better technique than their predecessors. And yet we are far from being within sight of the solution of our problem.

You remember Carlyle's description of the situation of England

in 1843 when he spent the first seven weeks of the year in writing *Past and Present.*

"England is full of wealth," he wrote, "of multifarious produce, supply for human want in every kind; yet England is dying of inanition. With unabated bounty the land of England blooms and grows; waving with yellow harvests; thick-studded with workshops, industrial implements, with fifteen millions of workers, understood to be the strongest, the cunningest, and the willingest our Earth ever had; these men are here, the work they have done, the fruit they have realized is here, abundant, exuberant, on every hand of us: and behold, some baleful fiat as of Enchantment has gone forth, saying, 'Touch it not ye workers, ye master-workers, ye master-idlers; none of you can touch it, no man of you shall be the better for it; this is enchanted fruit.' "

It is true that Carlyle made the grave mistake of supposing that this condition of affairs was a chronic instead of an intermittant disease of the body politic; but for all that his description applies as well to the United States in 1921 as to England in 1843. And this description points straight to the heart of the difficulty which we must face in our efforts to control the business cycle.

This past year millions of us have been idle when we wished to work, billions of dollars worth of plant and machinery have stood unused when the owners longed to start their furnaces, and what we wanted to produce we needed to consume. The Edict of Enchantment which forbade us to do what we wished was pronounced by the Money Economy. We are periodically mastered by this social machinery we have made, and stand idle and needy at its bidding. For with all its efficiency the Money Economy has a fundamental defect—it warps the aim of our economic activity. What we want as human beings is to make serviceable goods. What we are compelled to do as citizens of the money economy is to make money. And when for any reason it is not profitable to make goods we are forced to sacrifice our will as human beings to our will as money makers. That is the heart of the paradox.

If I am right about this fundamental matter, I can hardly be wrong in taking an optimistic view of the future. For since the money economy is a complex of human institutions, it is subject to amendment. What we have to do is to find out just how the rules of our own making thwart our wishes and to change them in detail or change them drastically as the case may require. Not that this task is easy. On the contrary, the work of analysis

is difficult intellectually and the work of devising remedies and putting them into effect is harder still. But one has slender confidence in the vitality of the race and in the power of scientific method if he thinks a task of this technical sort is beyond man's power.

To do our large share in this work as economists we must develop our contribution to the theory of human behavior along three lines. First, we must make an increasingly thorough use of quantitative analysis, coöperating vigorously in the efforts at securing better statistical data on the one side, and on the other side utilizing such data as we have to the best advantage. Secondly, we must be clear in our own minds about the role which institutions play in guiding our behavior. Among these institutions none is more important than the money economy. No one cares deeply for what Professor Fetter calls "price economics" on its own account. All of us agree with him that our ultimate aim is social welfare. But we cannot promote social welfare effectively without finding where our dominating pecuniary institutions serve us well and where they serve us ill. So we have the best of reasons from the viewpoint of "welfare economics" itself for devoting much of our attention to the technical exigencies of the price system. Finally, I think we must adopt a courageously constructive attitude toward our problem. "—Social science seems to me," said John Dewey in 1917, "to stand about where physical science stood three centuries ago in the early years of the seventeenth century. There is the same halting and obstructed tendency to move from the attitude of the outside spectator, classifier, and justifier of things as they are outwardly given to that of the active participant and modifier, from that of wholesale organization to that of retail reorganization."[5] Let us join whole-heartedly in that movement, cultivating an experimental habit of mind, and endeavoring to add our mites to the knowledge that may some day give mankind control over their own behavior.

[5] "The Need for Social Psychology," *Psychological Review,* July, 1917; XXIV, 275.